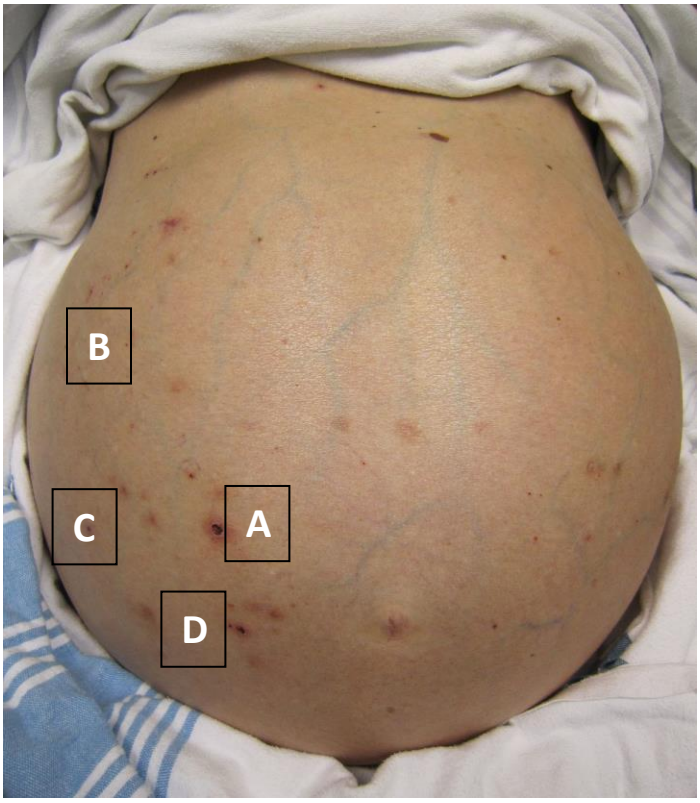
Paracentesis Pre-work Quiz:

1. Which of the following is an indication for a large volume paracentesis in a patient with large ascites?
   a. Early satiety
   b. Lower extremity edema
   c. Acute kidney injury
   d. No additional indication necessary if a patient has large ascites

2. Which of the following is a strict contraindication to a large volume paracentesis?
   a. Sepsis
   b. Inta-abdominal hypertension
   c. INR >2
   d. Plt <50

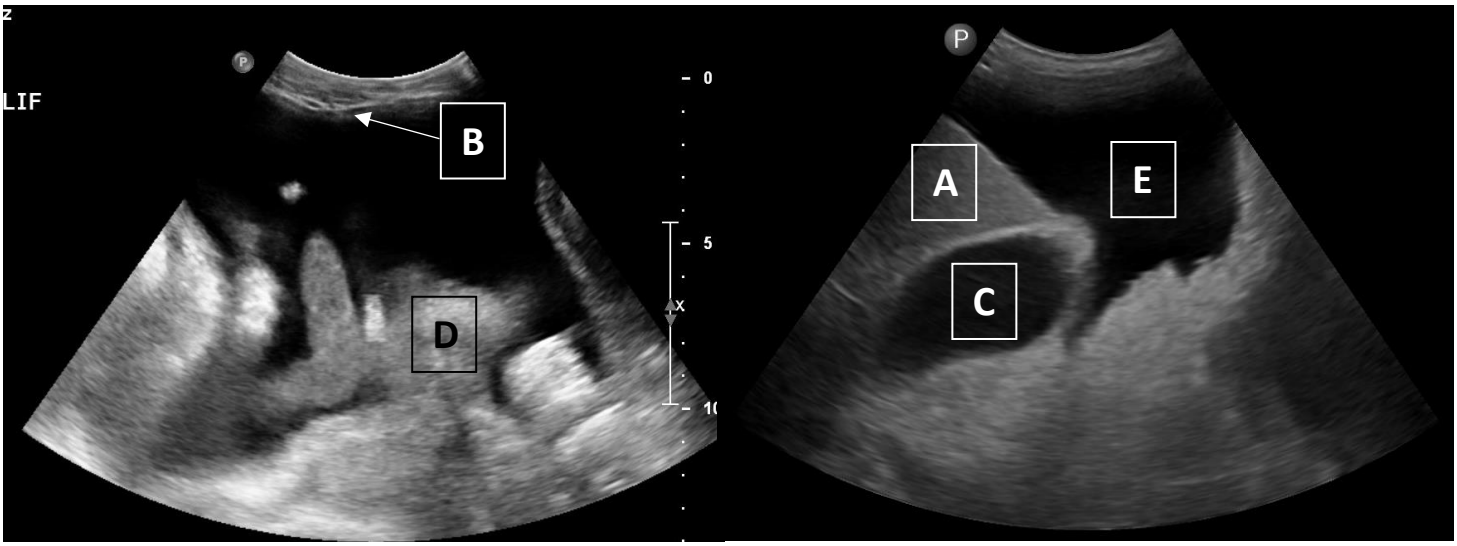
3. Which of the following is the most ideal site for a paracentesis? C



4. What is the preferred ultrasound transducer for evaluation of ascites?
   a. Phased array
   b. Linear
   c. Curvilinear
   d. Hepatic

5. Identity the following structures

Peritoneum_B__
Bowel_D__
Liver_A__
Ascites _E_
Gallbladder C



6. What is the minimum distance between the peritoneum and adjacent structures in all 3 dimensions that is safe for a therapeutic paracentesis?
   a. 1cm
   b. 3cm
   c. 4cm
   d. 5cm

7. Which of the is NOT a potential complication of a large volume paracentesis?
   a. Bowel obstruction
   b. Hypotension
   c. Abdominal wall hematoma
   d. Persistent ascites fluid leak
   e. Acute kidney injury

8. What is the most appropriate concentration and amount of albumin to infuse for a 10L large volume paracentesis?
   a. 50g of 25% IV albumin
   b. 75g of 25% IV albumin
   c. 50g of 5% IV albumin
   d. 75g of 5% IV albumin

9. A patient presents with sub-acute shortness of breath and abdominal distention with pain. Ascites is noted on bedside ultrasound and a paracentesis is performed. Two liters of clear straw-colored fluid is removed. Fluid studies reveal a leukocyte count of 420 (40% PMNs), ascitic protein is 3.3 g/dL and ascitic albumin of 2.1 g/dL. Serum studies reveal a creatinine of 1.9 mg/dL, total bilirubin of 1.5 mg/dL, AST 70 U/L, ALT 100 U/L, albumin 3.3 g/dL. What is the next step in management?
   a. Obtain a liver ultrasound with Doppler

b. Obtain a transthoracic echocardiogram
c. Consult hepatology for a liver biopsy
d. Start ceftriaxone for presumed spontaneous bacterial peritonitis

10. A patient with known alcoholic cirrhosis whose ascites is typically well managed with diuretics presents with a tense and painful abdomen. He denies other new symptoms. Large ascites is confirmed with bedside ultrasound and a therapeutic paracentesis is performed. Which of the following is the most appropriate list of peritoneal fluid studies to obtain? Cell count, gram stain and culture, lactate dehydrogenase, albumin, total protein
    a. Cell count and cytology
    b. Cell count and albumin
    c. Cell count, gram stain and culture
    d. None, just remove fluid until abdominal pain improves

Paracentesis Pre-work Quiz: (correct answers bolded)

11. Which of the following is an indication for a large volume paracentesis in a patient with large ascites?
    a. Early satiety
    b. Lower extremity edema
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    d. No additional indication necessary if a patient has large ascites

12. Which of the following is a strict contraindication to a large volume paracentesis?
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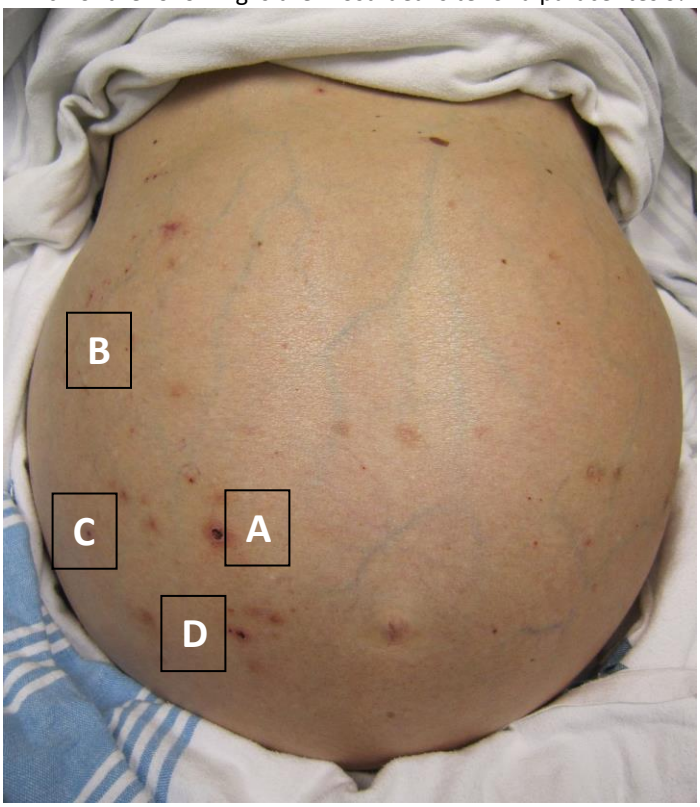

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15. Identity the following structures

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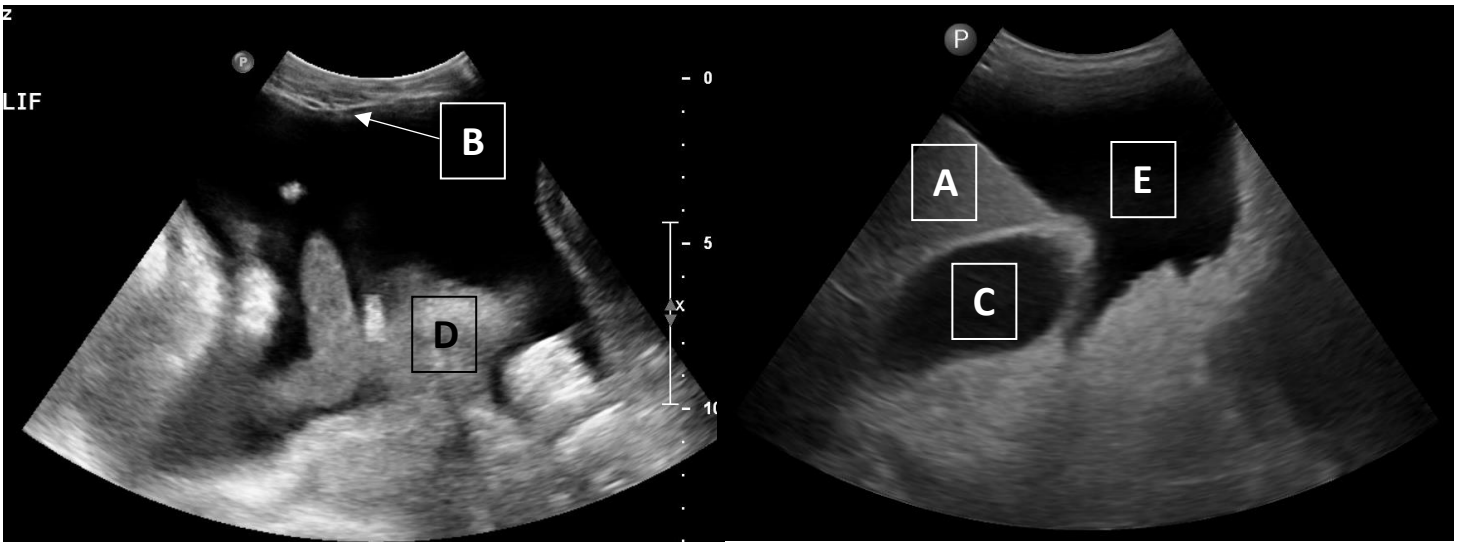

16. What is the minimum distance between the peritoneum and adjacent structures in all 3 dimensions that is safe for a therapeutic paracentesis?
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17. Which of the is NOT a potential complication of a large volume paracentesis?
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